

REMARKS/ARGUMENTS

Claims 1-5 and 7-21 are pending, with new claims 18-21 being presented in this Amendment Under 37 C.F.R. 1.116.

Applicants' undersigned representative extends thanks to Examiner Campos for the courtesy of a telephone discussion relating to the amended claims on November 6, 2006. In the telephone discussion, Examiner Campos indicated further search would be necessary for the claims as amended. This Amendment After Final is submitted with the accompanying Request for Continued Examination (RCE) to effect entry of this document. Per the telephone discussion, applicants will await the examiner's first Office Action in the RCE case.

In the pending Office Action mailed August 4, 2006, the Examiner asserted that the Takaichi feature of a read command history table 5 (Fig. 1 of Takaichi) with "historic information of read commands" comprises the "data readout activity" of the claimed invention. The independent claims, as amended herein, now recite "access history information" that "identifies a data access pattern" as well as the "history of data readout activity" previously recited. The access history information is described in the specification at page 11, referring to the history information management table 301 and the history information saving list 302 that are illustrated in Figure 5. The history information 301 includes history ID information, which is explained at page 10 as identifying an access pattern to the storage device. The patterns may include, for example, sequential access, random access (see page 10, lines 12-17).

As noted in the Office Action, the Takaichi patent "read command history table" 5 in Fig. 1 describes historic information of read commands (paragraph 0013 and 0048 of Takaichi). It is submitted that the amended claims recite "access history information" that "identifies a data access pattern", which is different from the read command history of Takaichi. The read command history of Takaichi simply provides information relating to positional relationships of data as actually stored on a disk. See, for example, Fig. 5 of Takaichi. The read command history does not identify a data access pattern. Rather, Takaichi saddles the storage device with the burden of processing the read command history and discerning positional

relationships of data as stored on disk and thereby making a preread decision (see Fig. 6). Thus, the Takaichi preread decision is based purely on positional relationships of data stored on a disk.

In contrast, the claimed invention makes use of access history information relating to data access pattern and also history of data readout activity. Moreover, the claimed invention also relies upon information about the specified computer that will receive the requested data. In addition, the claimed invention recites that the pre-read operation (and the information for carrying out the operation) is in response to a command received from a management computer that communicates with the storage device (such as the management computer 108 illustrated in Figure 1). These features are recited in all the independent claims, comprising claims 1, 10, 13, 17, 20, and 21.

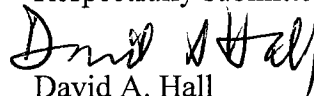
The Omura patent was cited for reference to a plurality of computers. Thus, Omura does not contain any features that would make up for the deficiency of Takaichi, and no combination of Takaichi with Omura or the other cited references would provide the claimed feature of recording the access history information as defined above and in the specification to identify a data access pattern.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application (claims 1-5, 7-21) are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 858-350-6100.

Respectfully submitted,



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